

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An apparatus for manufacturing a semi-solid metallic slurry, the apparatus comprising:

at least one sleeve with two open ends, through one of which molten metal in liquid state is loaded into the sleeve;

a stirring unit which applies an electromagnetic field to the molten metal in the sleeve;
and

a shutter unit which closes the other end of the sleeve to form a base of the sleeve and opens the base of the sleeve to discharge a slurry after manufacture from the sleeve;

wherein said electromagnetic field is applied to said sleeve before the completion of said loading of molten metal.

2. (Original) The apparatus of claim 1, wherein the shutter unit is a stopper fixed to the other end of the sleeve.

3. (Original) The apparatus of claim 1, wherein the shutter unit is a plunger inserted into the other end of the sleeve and moved up and down.

4. (Original) The apparatus of claim 1, further comprising a pressing unit inserted into the one end of the sleeve to press the slurry in the sleeve down.

5. (Currently amended) The apparatus of claim 1, wherein the molten metal in the sleeve is cooled until the molten metal has a solid fraction of 0.1-0.7 by weight.

6. (Original) The apparatus of claim 5, further comprising a temperature control element to control the temperature of the molten metal during cooling.

7. (New) A method of manufacturing a semi-solid metallic slurry comprising:

providing a sleeve with a first and a second open ends;

applying an electromagnetic field to said sleeve with a stirring unit;

closing said first open end with a shutter unit;

loading molten metal in liquid state into said sleeve through said second open end;

stirring said molten metal with said stirring unit; and

opening said second open end to discharge a slurry from said sleeve;
wherein said electromagnetic field is applied to said sleeve before the completion of said loading of molten metal.

8. (New) The method of claim 7, wherein said shutter unit is selected from the group consisting of:

a stopper fixed to said first open end,
a plunger inserted into said first open end and moved up and down.

9. (New) The method of claim 7, comprising further:
inserting a pressing unit into said second open end; and
pressing said slurry in said sleeve down.

10. (New) The method of claim 7, comprising further cooling said molten metal in said sleeve until said molten metal has a solid fraction of 0.1-0.7 by weight.

11. (New) The method of claim 10, comprising further controlling a temperature of said molten metal during cooling.

12. (New) The method of claim 7, wherein said electromagnetic field is applied to said sleeve prior to said loading of said molten metal in liquid state into said sleeve through said second open end.

13. (New) The method of claim 7, wherein said stirring of said molten metal with said stirring unit takes place during said loading of said molten metal in liquid state into said sleeve through said second open end.

14. (New) A system of manufacturing a semi-solid metallic slurry comprising:
means for providing a sleeve with a first and a second open ends;
means for applying an electromagnetic field to said sleeve;
means for closing said first open end;
means for loading molten metal in liquid state into said sleeve through said second open end;
means for stirring said molten metal; and
means for opening said second open end to discharge a slurry from said sleeve;
wherein said electromagnetic field is applied to said sleeve before the completion of said loading of molten metal.

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15. (New) The system of claim 14, comprising further means for pressing said slurry in said sleeve down.

16. (New) The system of claim 14, comprising further means for cooling said molten metal in said sleeve until said molten metal has a solid fraction of 0.1-0.7 by weight.

17. (New) The system of claim 16, comprising further means for controlling a temperature of said molten metal during cooling.